



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,521	06/26/2003	Michele J. Alberg	ATMI-631	5747
25559	7590	02/10/2005	EXAMINER	
ATMI, INC. 7 COMMERCE DRIVE DANBURY, CT 06810			HU, HENRY S	
			ART UNIT	PAPER NUMBER

1713

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,521

Applicant(s)

ALBERG, MICHELE J.

Examiner

Henry S. Hu

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment of October 4, 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to Amendment filed on October 4, 2004. Claims 1, 3, 5, 8-10, 14, 16 and 18 were amended, while two **new independent Claims 19 and 20** were added. To be more specific, **Claims 1, 3, 5, 8-10 and 14** were amended to correct the typographical errors as suggested in claim objection by the examiner; Claims 10, 16 and 18 were amended to be in a clear form. The Applicants have provided the support for new process **Claims 19 and 20** on page 10 of Remarks.

With respect to specification objection as well the typographical errors mentioned above, the Applicants have made appropriate corrections on pages 1-2, 4 and 8-9. In view of above amendment, the examiner thereby withdraws the specification objection and all of the claim objections. **Claims 1-20 are now pending.** An action follows.

2. Newly submitted claims 19 and 20 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

In comparison with amended set of process Claims 1-18, new and independent **Claims 19 and 20 are new process claims** regarding the specific conditions on count reduction of PTFE film. **They are "independent or distinct" from the invention originally claimed.** To be more specific, **Claims 1, 10 and 12** were using only a polytetrafluoroethylene material, the

Art Unit: 1713

condition on time and/or temperature are in general concept and it may mean to use a polytetrafluoroethylene-containing material, for instance, anything comprising polytetrafluoroethylene. In a close examination, both **Claims 19 and 20 are in the independent form and only use PTFE in the form of film**. In a close comparison with original parent Claims 1, 10 and 12, parent **Claim 19** is a quite different process claim since it is for determining the temperature and time, while parent **Claim 20** is a different process claim with a combination of three specific features including temperature, time and **particle size**.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. It is noted that the limitation of **Claims 1-18 is more closely related to the claimed limitation originally disclosed**. Accordingly, **Claims 19 and 20 are “withdrawn from consideration as being directed to a non-elected invention”**. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Argument

3. Applicant's argument filed on August 11, 2004 has been fully considered but they are not persuasive. The focal arguments related to the patentability will be addressed as follows: In view of the Applicants' argument on pages 11-16 of Remarks, the 103(a) rejections over Bergman et al. for Claims 1-18 is sustained

Claim Rejections - 35 USC § 102

Art Unit: 1713

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. *The limitation of parent **Claim 1** in the present invention relates to a method comprising: (A) heating a polytetrafluoroethylene material to an elevated temperature; and (B) maintaining said heating for a time sufficient to substantially reduce a particle count character of the polytetrafluoroethylene material. Parent **Claim 10** relates to the same method of **Claim 1** but with a specific heating temperature, while parent **Claim 12** relates to the product produced from **Claim 1**. See other limitations of dependent **Claims 2-9, 11 and 13-18**.*

6. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergman et al. (US 5,377,708) for the reasons set forth in **paragraphs 6-8 of office action dated 8-11-2004 as well as the discussion below**.

7. **Applicants:** In each of parent Claims 1, 10 and 12, the Applicant has claimed an unexpected way of obtaining a heat treatment method to solve the particle shedding problem, it comprises: (A) heating a polytetrafluoroethylene material to an elevated temperature; and (B) maintaining said heating for a time sufficient to substantially reduce a particle count character of the polytetrafluoroethylene material. With respect to 102 rejections over Bergman et al. for

Art Unit: 1713

Claims 1-18, the Applicants allege that Bergman reference **does not disclose such a heat treatment to “reduce particle count up to “fifteen to almost sixty times” those of untreated PTFE”** (see pages 11-12 of Remarks). The Applicants further allege that the above-mentioned heating method is particularly applied to **PTFE film material since the liners have the containment and dispensing of liquids stored in.**

8. **Examiner:** Even the reference Bergman is only disclosing a method for improved process of semiconductor wafers and the like by using heat to remove or volatilize the by-products from the wafer so that **a low particle count performance is obtained**, it anticipates the limitation of Claims 1, 10 and 12. It is accomplished by suitably heating the wafers or **other unit being processed**. Please pay attention on **TEFLON or other suitable fluoropolymer being included** in the heating system as the inner bowl piece, bottom wall liner, plug and bellows (column 16, line 14-18; column 17, line 21-22).

The examiner has recognized that **“PTFE polymer in the form of film” is particularly used for heating in current application and some unexpected results in particle shedding in comparison with the untreated PTFE film has been obtained.** In a close examination of the limitation of Claims 1, 10 and 12 having the language of “a polytetrafluoroethylene material”, it may mean using **“a polytetrafluoroethylene-containing material”** and therefore it may include anything as long as it has a PTFE homo- and co-polymer as one of the component. Even **such a heat treatment as the Applicants disclosed can “reduce particle count up to “fifteen to almost sixty times” those of untreated PTFE”**, it is not included as limitation of Claims 1, 10

Art Unit: 1713

and 12 at all. It is noted that the examiner cannot and would not read specification into the claim according to MPEP.

9. Additionally, it may be a common practice in the art to have the reduction of particle count by heating many types of materials since the heating would always evaporate the volatile contaminant as well as allowing the molecular rearrangement especially when the temperature is close to melting point. In summary, without specifying (A) the degree of count reduction and (B) a pure PTFE in the form of film being used, the Bergment reference anticipates the limitation of parent Claims 1, 10 and 12.

Conclusion

10. With respect to the pending **Claims 1-20, Claims 19 and 20 are “withdrawn from consideration as being directed to a non-elected invention.”** Claims 1-18 directly relate to original Claims 1-18 and have support in the specification and claims originally filed, they **still carry the same scope of original limitations**. Therefore, the same rationale recited in the rejection of original Claims 1-18 can be applied to reject Claims 1-18.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

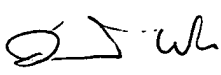
Art Unit: 1713

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Henry S. Hu whose telephone number is (571) 272-1103. The examiner can be reached on Monday through Friday from 9:00 AM –5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306 for all regular communications. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Henry S. Hu

February 7, 2005



DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700